DASHKOVSKAYA, Z.F.; REBRIN, S.P., nauchn. red.; MIZINA. I.N., red.

[Particle board (tyrsolit) from the finest wood waste] Drevesnye plity (tyrsolit) iz naibolee melkikh otkhodov drevesiny. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 31 p. (MIRA 17:12)

BAHRIN, S.F., BORISOV, N.A.; GUBERNSKAYA, L.T., red.

[Production of fiberboard by the dry method without binders in the Czechoslovak S.S.R.] Proizvodstvo drevesno-voloknistykh plit sukhim sposobom bez sviazuiushchikh v ChSSR. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl., i lesnomu khoz., 1964. 20 p. (MIRA 18:5)

REBRIN, S.P.; LISITSKIY, P.A., red.; KOLOMEYER, V.Z., tekhn.red.

[Parquet planks, their design and use; practices of foreign enterprises] Parketnye doski, ikh konstruktsii i primenenie; iz opyta zarubezhnykh predpriiatii. Moskva, TSentr.biuro tekhn.informatsii Glavstandartdoma, 1959. 23 p. (MIRA 13:1)
(Parquet floors)

SOV/143-59-1-2/17

8(6)

AUTHOR: Butuzov, A.I., Candidate of Technical Sciences, Docent, Dean, and Rebrov, S.A., Candidate of Technical Sciences, Docent, Dean

TITLE: Departments of Heat Engineering and Electrical Engineering of the Kiyev Polytechnical Institute (On the Occasion of the 60th Anniversary of the Institute) (Teplotekhnicheskiy i elektrotekhnicheskiy fakul'tety KPI (k 60-letiyu instituta))

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika, 1959, Nr 1, pp 5-14 (USSR)

ABSTRACT: Part I, Department of Heat Engineering (pp 5-10). Before the Revolution, only 5 to 10 thermopower engineers a year were graduated from the institute. An independent Department of Heat Engineering was created during the Soviet period; 125 to 200 engineers annually are graduated from it now for electropower engineering, power plants and industrial enterprises. In the thirties, considerable research was made by I.T. Shvets of processes in steam

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Departments of Heat Engineering and Electrical Engineering of the Kiyev Polytechnical Institute (On the Occasion of the 60th Anniversary of the Institute)

engines and turbines, by V.I.Tolubinskiy on the theory of steam boilers, by M.A.Kondak in the field of modernization of boiler plants in industry, and by M.A.Kichigin in the field of rationalization of thermal economy in the sugar industry. During the same period, research was started, under V.I.Tolubinskiy, in the field of heat exchange on the basis of the theory of similarity and thermal modeling; the experimental investigation of the influence of the angle of attack on heat exchange and the resistance of the boiler bundle. At present, the Department of Heat Engineering has 5 Chairs: boiler plants (Doctor of T.Sc. Professor V.I. Tolubinskiy), steam and gas turbines (Docent A.S.Semenov), thermopower equipment of power plants (M.A.Kondak), theoretical foundations of heat engineering and industrial thermopower engineering (Docent A.I.Butuzov) and industrial economy (Docent N.M.Lych). In recent years, the Chairs of the Department have been cooperating

Departments of Heat Engineering and Electrical Engineering of the Kiyev Polytechnical Institute (On the Occasion of the 60th Anniversary of the Institute)

with industry in the following fields: construction of high-power boiler units (V.I.Tolubinskiy), raising the efficiency of thermopower equipment (M.A.Kondak, B.P. Taranov), highly forced heat exchange (V.I.Tolubinskiy, A.P.Ornatskiy), combustion chambers of gas turbines (A.S.Semenov, V.A.Khristich), cooling of the rotors of big turbogenerators (S.N.Faynberg). In 1957, a laboratory of heat exchange and gasodynamics was created. The laboratory dedicates much of its work to theoretical and experimental research of the ways for intensification of heat exchange, to the thorough study of the heat-exchange mechanism, and to gasodynamic research. There are 2 photographs.

SOV/143-59-1-2/17

Departments of Heat Engineering and Electrical Engineering of the Kiyev Polytechnical Institute (On the Occasion of the 60th Anniversary of the Institute)

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskiy institut (Kiyev, Order of Lenin, Polytechnical Institute)

SUBMITTED: December 16, 1958

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ARKHANGEL'SKIY, V.D.; REBRIN, S., nauchn. red.; ZARAPINA, Ye.Ya., red.; PETRENKO, V.M., tekhn. red.

[Units for drying shavings and sawdust] Agretaty dlia sushki struzhek i opilok. Moskva, TSentr. in-t tekhn. informatsii i ekon. issledovanii po lesnoi, buma bhnoi i derevoobrabat. promyshl., 1963. 23 p. (MIRA 17:4)

REBRIN, S.P., inzh.; TANSKIY, V.V., inzh.

"Hardboards" [in German] by Werner Scheibert. Reviewed by S.P.Rebrin, V.V.Tanskii. Der.prom. 8 no.6:27 Je '59. (MIRA 12:8)

(Hardboard) (Scheibert, Werner)

REBRIN, S.P.

Prospects for the development of the production of particle board. Der. prom. 14 no.8:1-3 Ag '65. (MIRA 18:10)

1. Upravleniye drevesnykh plit, fanery i spichek Gosleskomiteta.

SHVARTSMAN, Grigoriy Mikhaylovich, kand. tekhn. nauk; REBRIN, S.P., red.; DONNIKOVA, A.A., red. izd-va; VDOVINA, V.M., tekhn. red.

[Production of particle board] Proizvodstvo drevesno-struzhechnykh plit. Moskva, Goslesbumizdat, 1961. 178 p. (MIRA 14:8)
(Hardboard)

REBRIN, S. P.

Simplest tools for drivers of gas generator automobiles ZIS-21; and atlas of drawings. Moskva, Goslestekhizdat, 1945. 24 p. (50-25573)

TL229.G3R38

1. Automobiles - Apparatus and supplies.
2. Gas-producers.

PONOMAREV, A.A.; REBRINA, N.P.

Factors influencing the killing by accumulated water and smothering of winter wheat in the Moscow region. Fiziol.rast. 12 no.4:693-701 Jl-Ag '65. (MIRA 18:12)

1. Moskovskoye otdeleniye Vsesoyuznogo instituta rasteniye-vodstva, Moskovskaya oblast', Mikhnevo. Submitted October 19, 1964.

YUGOSLAVIA/Chemical Technology. Chemical Products and Their Application. Food Industry. H-28

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 16137

Author : Rebrina S.
Inst :
Title : Fresh Cottage Cheese

Orig Pub: Higijena, 1956, 8, No 4, 288-297.

Abstract: Investigation of the chemical composition of 53 samples of fresh cottage cheese has shown that it contains 79.19% moisture, 12.75% protein, 3.71% fat (or 17.26% on the dry weight basis), 0.94% ash, 0.14% Ca, 0.15% P, 43.15 γ /100 g of vitamin B_1, 795.40 γ /100g of vitamin B2. Chemical composition of the cheese undergoes no changes with the seasons of the year.

Card : 1/1

REBRINA, S.

Fresh cottage cheese. Higijena, Beogr. 8 no.4:288-297 1956.

1. Centralni higinjenski zavod, Zagrev.
(MILK
cottage cheese, nutritive value (Ser))

REBRISTAYA, O.V.; SKVORTSOV, A.K.; TOLMACHEV, A.I.; TSVELEV, N.N.; YURTSEV, B.A.

[Arctic flora of the U.S.S.R.; a critical survey of vascular plants found in the Arctic regions of the U.S.S.R.] Arkticheskaia flora SSSR; kriticheskii obzor sosudistykh rastenii, vstrechaiushchikhsia v arkticheskikh raionakh SSSR. Moskva, Nauka. No.2. [Family Gramineae] Semeistvo Gramineae. 1964. 272 p. (MIRA 17:10)

REBRISTAYA, O.V.

Distribution of Potentilla pulchella R.Br. in the Soviet Arctic. Bot.zhur. 45 no.3:397-399 Mr '60. (MIRA 13:6)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR, Leningrad.
(Russia, Northern--Cinquefoil)

PETROVSKIY, V.V.; REBRISTAYA, O.V.; YURTSEV, B.A.

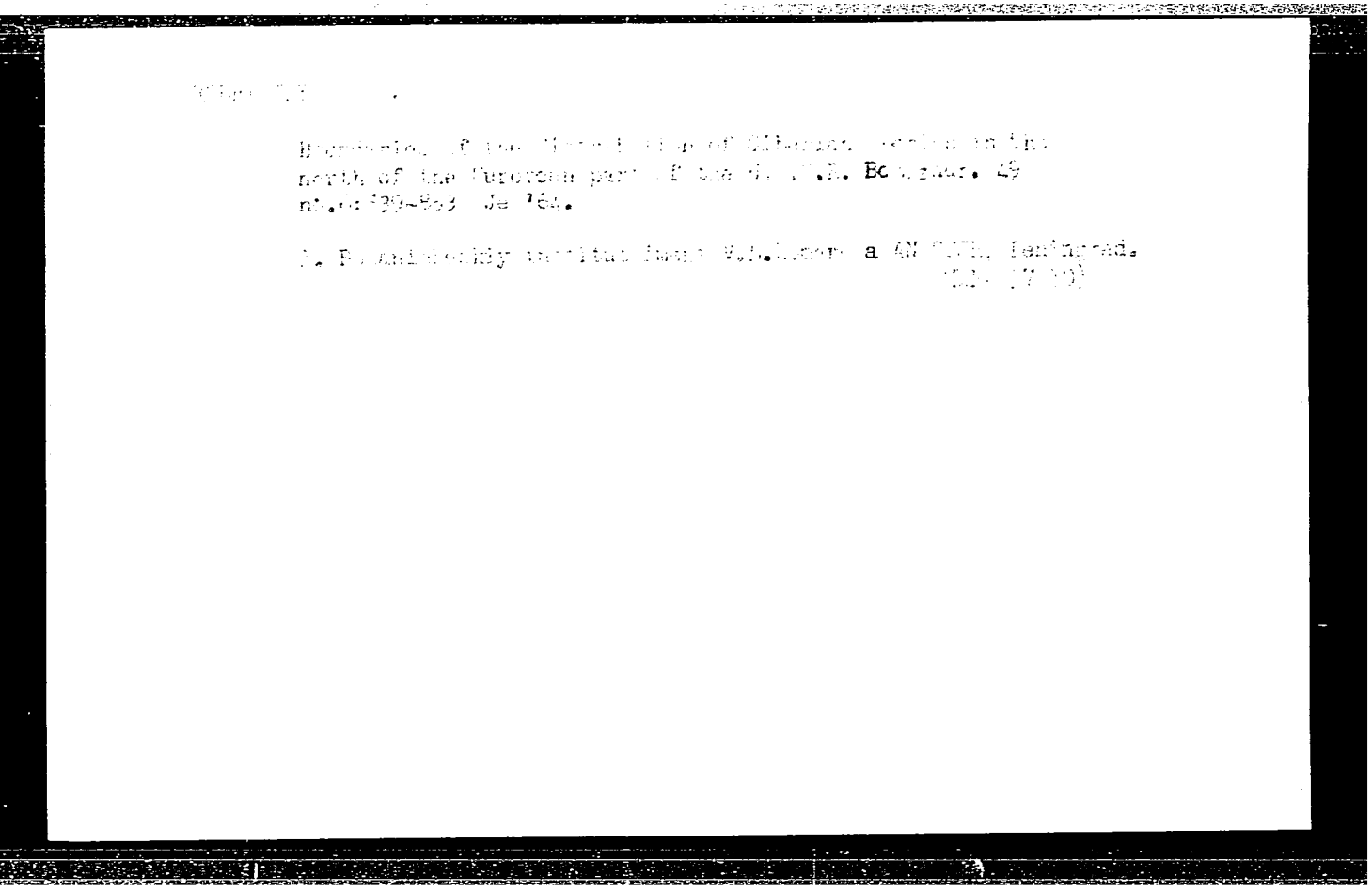
Aleksandr Innokent'evich Tolmachev; on his 60th birthday. Bot. zhur. 48 no.12:1845-1856 D '63. (MIRA 17:4)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

TOLMACHEV, A.I.; REBRISTAYA, O.V.

Geographical distribution of Crepis multicaulis Ledeb. and the forgotten species Crepis Gmelini (L.) Tausch. Bot. mat. Gerb. 21:402-415 '61. (MIRA 14:10)

(Hawk's beard)



PETROVSKIY, V.V.; REBRISTAYA, O.V.

Characteristics of the flora of East European forest tundra.
Bot. zhur. 50 no.7[illegible] Jl '65.
(MIRA 18:11)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

REBRISTYKH, Marfa Stepanovna; SELEZNEV, N.G., red.; PULIN, L.I., tekhn.red.

[In close touch with technology] V tesnoi druzhbe s tekhnikoi. Tula, Tul'skoe knizhnoe izd-vo, 1960. 15 p.
(MIRA 14:1)

1. Zven'yevaya kolkhoza "Gigant" Skopinskogo rayona Ryazanskoy oblasti (for Rebristykh).
(Sugar beets) (Agricultural machinery)

REBRIYEV, I.Ye., inzhener.

Installation for dry rendering of solid fats in closed vessels.
Masl.-zhir.prom.21 no.1:32 '56. (MIRA 9:6)

1.Stalingradskiy margarinovyy zavod.
(Oil industries--Equipment and supplies)

KEMKO, A.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA. Vol. 35, No. 11, Nov., 1958.

KEMKO, A. Health-giving thermal springs of Piestany. p. 424.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 4, April 1959.
Unclass.

KUDRYAVTSEV, Nikolay Maksimovich [Kudriavtsev, M.], svinar'; REBRO, P., red.; PAKHOLYUK, R., tekhn.red.

[For 1500 centners of pork] Za 1500 tsentneriv svynyny. Zaporozh'e, Zaporiz'ke knyzhkovo-gazetne vyd-vo, 1960. 14 p. (MIRA 14:12)

1. Sovkhoz "Bol'shevik", Melitopol'skogo rayona (for Kudryavtsev). (Ukraine--Swine)

ALEKSEYEV, Yu.V.; ASTAF'YEV, A.F.; POPOV, O.A.; Prinimali uchastiye:
AGAYEV, A.G.; REBROV, A.G.; KULAKOV, N.N.

Adopting the roasting of nickel concentrates in a fluidized bed at the "Severonikel'" Combine. TSvet. met. 36 no.7:35-42 Jl '63.
(MIRA 16:8)

(Nickel--Metallurgy) (Fluidization)

L 18768-63 EPR/EWP(r)/EPA(b)/EPF(c)/EPF(n)-2/BDS/ES(w)-2 AFFTC/ASD/
IJP(C)/SSD Ps-4/Pd-4/Pr-4/Pu-4/Pab-4 WW S/0124/63/000/008/B025/B025
ACCESSION NR: AR3006432

82

SOURCE: RZh. Mekhanika, Abs. 8B149

AUTHOR: Rebrov, A. K.

TITLE: Experimental study of thermal transfer from cylinders during free motion of air in a rarefied space

CITED SOURCE: Tr. Kazansk. aviats. in-ta, vy*p. 66, 1961, 73-82

TOPIC TAGS: heat transfer, rarefied gas, Nusselt number, thermocouple compensated heating, radiation loss, manometer, Prandtl number

TRANSLATION: This work is devoted to the experimental study of heat transfer of vertical and horizontal cylinders in a rarefied gas. The introduction notes the inadequacy of existing experimental data on the problem being treated and the necessity of carrying out experiments at low pressures. The experimental apparatus is a cylinder 520mm in diameter and 600mm high. Evacuation was done by RVN-20 and MM40-A pumps. The pressure range of the study was from 10-3 to 130 mm of mercury. The pressure was measured by a Mach-Liaude manometer, by a U-shaped manometer and by a VT-2 vacuummeter. The cylinders which were studied were prepared from

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stainless steel and copper. The heating of the cylinders was done either by a current from an accumulator flowing through it or by a heater. To eliminate the loss of heat along the axis of the cylinder, compensated heating was used. The temperature was measured by a nichrome-constantan thermocouple. Thermal transfer due to radiation and heat loss was determined during a pressure in the chamber of the order of 2.10^{-5} mm of mercury. To diminish the radiant thermal current, the samples were carefully polished. The heat transfer from the cylinders due to thermal conductivity and natural convection was determined at 10^{-3} mm of mercury $< p <$ < 130 mm at a constant temperature. The relative error of the measurements did not exceed 1-4% for the various quantities which were measured. The experimental results were put in criterial form in the form of the dependence of the Nusselt number N on the Grasgof number G and the Prandtl number P. For the horizontal cylinder, it was found that

$$N = C(GP)^n \qquad (1)$$

where C and n are variables depending on P and G. In the work it is shown that the effect of the walls of the chamber on the heat transfer leads to the increase of N in comparison with the case of the unbounded space. The analysis of the results for the vertical cylinder shows that for the absence of the effect of the walls

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ACCESSION NR: AR3006432

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one may obtain the generalized formula

$$N = C\,(GP)^n \left(\frac{d}{L}\right)^m \qquad (2)$$

The quantity C and the quantity n in this formula are the same as in the horizontal cylinder case, and m is a function of P and G. Graphs are drawn with the help of which one may determine the system of cutoff of free motion and transition to the system of pure thermal conductivity between the cylinder and the walls of the chamber for $d/L \leq .01$. Bibl. 5 names. V. A. Sukhnev

DATE ACQ: 28Aug63 SUB CODE: PH, AI ENCL: 00

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L 18767-63 EPR/EPA(b)/EPF(c)/EWT(1)/EPF(n)-2/BDS AFFTC/ASD/IJP(C)/SSD
Ps-4/Pd-4/Pr-4/Pu-4 WW
ACCESSION NR: AR3006433 S/0124/63/000/008/B025/B026

SOURCE: RZh. Mekhanika, Abs. 8B150

78

AUTHOR: Rebrov, A. K.; Kislyakov, N. I.

TITLE: Heat transfer by a bounded plane plate during free motion of a rarefied gas

CITED SOURCE: Tr. Kazansk. aviats. in-ta, vy*p. 66, 1961, 91-96

TOPIC TAGS: heat transfer, rarefied gas

TRANSLATION: This work is devoted to the experimental determination of the heat transfer from a vertical plate in a rarefied gas. The experimental apparatus and technique was described in another of the author's works (see ref. 8B149). Plane packets of dimension 240 by 80mm and 80 by 80mm and thickness 1.4mm, made by sandwiching heating wires in a mica shell between copper plates of .5mm thickness. The heater worked from an accumulator. The experiments were conducted in the range $5 \cdot 10^{-3} < p < 120$ mm mercury. The experimental data show that the dependence of the thermal transfer coefficient α on the pressure p is qualitatively of the same form as for the cylinders, but the thermal transfer from the plates is less. It was shown that the thermal transfer from the plates in a bounded space depending on

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ACCESSION NR: AR3006433

pressure, can occur in the system of free motion, common thermal conductivity, and thermal conductivity, weakened by the presence of a discontinuity at the thermal-transferring surface. All the experimental data was put in the form of criterial dependences. For $5 \cdot 10^2 < GP < 2 \cdot 10^6$ the dependence

$$N_H = 0.74 (G_H P)^{0.25}$$

is given, where N G P are the Nusselt, Grasgof and Prandtl numbers. The index H signifies that as a characteristic of the length, the height of the plate, H is taken. Comparison is made of the experimentally obtained data with the formula of M. A. Mikheev. An analysis of the effect of the heat outflow from the side boundary of the plate is given. It is shown that the finite width of the lateral boundary must be taken into account for $\delta_{DH} < 18$ B. Here δ_{DH} is the thickness of boundary layer at the height of the upper edge of the plate, B is the width. Bibliog. 6 names. V. A. Sukhnev

DATE ACQ: 28Aug63 SUB CODE: AI, PH ENCL: 00

Card 2/2

REBROV, A. K.

"Heat-exchange of a cylinder during the free motion of gas in a rarefied space."

Report presented at the 1st All- Union Conference on Heat- and Mass- Exchange, Minsk, BSSR, 5-9 June 1961

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S/170/62/005/001/012/015
B125/B104

26.2181

AUTHOR: Rebrov, A. K.

TITLE: Free-molecular heat transfer at a wall

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 1, 1962, 111 - 114

TEXT: A formula is derived for a heat flow in parameters of heat exchange between free gas molecules and a solid wall in a layer so thin that intermolecular collisions are negligible. It is noted that the modified formula of K. B. Blodgett and I. Langmuir (Phys. Rev., 40, 78 - 104, 1932): $q = a\Lambda_0 p\sqrt{273.2/T_a}\,(T - T_a')$, where $\Lambda_0 = \frac{1}{2}\left(\frac{\gamma+1}{\gamma-1}\right)\sqrt{\frac{R}{2\pi}}\,\frac{1}{\sqrt{M(273.2)}}$ denotes the thermal conductivity of "free" molecules and $\gamma = c_p/c_v$, is incorrect. The temperature jump $T - T_a$ (T = surface temperature, T_a = temperature directly at the wall, contrary to the above-mentioned previous paper) corresponds to the formulation of boundary conditions in the mechanics of rarefied gases. When the difference $T'' - T'$ is small, molecules flying upward and downward make

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B125/B104

Free-molecular heat transfer...

equal contributions to heat transfer. T'' and T' denote the temperatures at a distance equivalent to the mean free path on either side of a given surface. [illegible] of the heat flow at the wall is due to the molecules flying away. This is, however, possible only if a temperature jump occurs at the wall. For the heat flow at the wall, the following equation results from the heat [illegible] at the wall: $q = 2a\Lambda_0 p\sqrt{273.2/T_a}\,(T - T_a)/(2 - a)$, wherefrom $\Delta T = \frac{[illegible]}{[illegible]} \frac{q}{\Lambda_0 p\sqrt{273.2/T_a}}$ is obtained for the temperature jump in accordance with the well-known temperature jump formula of Kennard:
$\Delta T = [illegible] \frac{4}{\gamma + 1} \frac{\bar{\lambda}}{[illegible]} \frac{dt}{dx}$, where dt/dx is the temperature gradient at the wall. There are [illegible] references: 1 Soviet and 3 non-Soviet. The two references to English-language publications read as follows: Blodgett [illegible] and Langmuir [illegible] Phys. Rev., 40, 78 - 104, 1932; [illegible] Chemical Engineering Progress, 49, 12, 1953.

[illegible] institut, g. Kazan' ([illegible] Institute, Kazan')

[illegible]

Card [illegible]

X

REBROV, A.K.

Free-molecular heat transport near a wall. Inzh.-fiz.zhur. 5 no.1:111-114 Ja '62. (MIRA 15:3)

1. Aviatsionnyy institut, Kazan'.
(Gas flow) (Heat--Transmission)

REBROV, A. K.

"Heat Transfer of a Cylinder at Free Gas Motion in a Rarefied Space."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

REBROV, A.K.

Heat transfer in the free movement of rarefied air about a horizontal cylinder [with summary in English]. Inzh.-fiz. zhur. 4 no.9:32-39 S '61. (MIRA 14:8)

1. Aviatsionnyy institut, g. Kazan'.
(Heat--transmission) (Aerodynamics)

REBROV, A.K.

Experimental investigation of heat transfer of cylinders under free rarefied-air flow conditions. Trudy KAI no.66:73-82 '61.
(MIRA 16:10)

(Aerothermodynamics)

REBROV, A.K.; KISLYAKOV, N.I.

Heat transfer of a limited plane plate under free rarefied air flow conditions. Trudy KAI no.66:91-96 '61. (MIRA 16:10)

(Aerothermodynamics)

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ACCESSION NR: AT4024397 S/2529/61/000/066/0073/0082

AUTHOR: Rebrov, A. K.

TITLE: The experimental investigation of heat transfer from cylinders during the free convection of rarefied air

SOURCE: Kazan. Aviatsionny*y institut. Trudy*, no. 66, 1961. Aviatsionny*ye dvigateli (Aircraft engines), 73-82

TOPIC TAGS: heat transfer, heat exchange, convection, free convection, rarefied air, altitude, high altitude, aircraft design, shell, shell pressure, pressure, characteristic dimension, heat conduction, conduction, thermal resistance, chamber wall, resistor, , heat leakage, heat loss, chamber shell

ABSTRACT: Designing aircraft for very high altitudes requires a deep understanding of heat transfer processes in rarefied space and an elaboration of engineering methods of heat transfer calculations for equipment in high altitude conditions. The practical requirements in this direction have not yet been satisfied. In 1929, M. A. Mikheyev and E. V. Stashkevich performed some investigations to clarify the influence of pressure on heat transfer from a cylinder enclosed in a coaxial shell. The pressure range applied was from 0.76 to 10^{-5}mm of a mercury column. However, these test results were not

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generalized by a correlation of the characteristic numbers. Generally, heat transfer decreases at decreasing pressure because of a weakening of the free convection. At further decreases of pressure for the enclosed test specimens a system is established in which heat transfer does not depend on pressure, but is determined by pure heat conduction until the formation of a temperature step at the heat transfer surface, equivalent to a substantial thermal resistance. After that, heat transfer intensity diminishes again with decreasing pressure; when the molecular length of the free path becomes greater than the distance of the sample to the walls of the enclosure, heat transfer becomes directly proportional to the pressure (free molecular heat transfer). Heat transfer from thin wires in a rarefied space under a bell was studied by Kite, Madden, and Piret. However, in these experiments a system of pure heat conduction was not discovered. This phenomenon can be explained by assuming an absence of chamber wall influence. Hence, the present authors undertook a special investigation to clarify the particularities of heat transfer at low pressures and to establish practical expressions for calculations. The experiments were conducted in vacuum equipment. A pressure range of 0.001 to 130 mm of a mercury column was used. The test specimens were the tubes described in the following table.

outside dia., mm:	1.31	3.17	3.17	3.17	9.9
length, mm:	320	300	200	103	320
material:	stainless steel				copper

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Samples 1.31 and 3.17 mm in diameter were heated by using them as resistors in an electric circuit. Heat leakage through the ends of the test samples was compensated for by heating the ends separately. The sample 9.9 mm diameter was heated by an electric resistance heater from the inside. To decrease the radiation losses, surfaces of the test cylinders were polished. Evaluation of the experimental results was performed in the form of correlations between Nusselt, Grashof, and Prandtl numbers and the simplex $\frac{d}{L}$, where d is the outer diameter of the test cylinder and L its length. Physical parameters were used corresponding to the mean temperature of the sample and the test chamber shell. The diameter of the test sample was the characteristic dimension used. For heat transfer from the horizontal cylinders under conditions of laminar free convection, the following expression was established from experimental data:

$$\left.\begin{aligned} &Nu = C\,(GrPr)^n, \\ \text{where}\quad &C = 0.98 - 0.01\,(\log GrPr)^2 \\ \text{and}\quad &n = 0.14 + 0.015 \log GrPr. \end{aligned}\right\} \qquad (1)$$

The thin expression holds for $GrPr = 10^{-7}$ to 10^{8}. Deviations of experimental data from this expression were explained by the effects of the chamber wall and by the existence of a temperature step at the heat transfer surface. Experimental values were plotted in a graph by M. A. Mikheyev. It was shown that the use of $Nu = 0.5$ at $GrPr < 10^{-3}$ represents

only a rough approximation. However, it was found that this discrepancy cannot be attributed to conditions of rarefaction of the air. Analysis of test results were vertical cylinders showed that during the absence of the chamber wall influence, curves representing the relation Nu = f(GrPr) are below those for horizontal cylinders by a distance depending on the relation $\frac{d}{L}$. The generalized expression for heat transfer from vertical cylinders was formulated as:

$$Nu = C\,(GrPr)^n \left(\frac{d}{L}\right)m, \qquad (2)$$

where C and n are the same as in (1) and m = 0.067 + 0.015 log GrPr. The ranges of validity of the above expression are GrPr = 10^{-4} to 10^2 and $1.5 \times 10^{-4} < \frac{d}{L} < 3 \times 10^{-2}$.

The limit of application for formulas (1) and (2) is a system close to pure heat conduction. For pure heat conduction, using the same values of Nu_{lim} and $(GrPr)_{lim}$ for both horizontal and vertical cylinders was recommended as a good approximation. It was indicated that these limit values depend on the ratio $\frac{d}{D}$, where D is the diameter of the enclosure or its other characteristic length. Orig. art. has: 6 figures and 6 formulas.

ACCESSION NR: AT4024397

ASSOCIATION: Aviatsionny*y institut, Kazan (Aviation Institute)

SUBMITTED: 15Apr61	DATE ACQ: 15Apr64	ENCL: 00
SUB CODE: AC	NO REF SOV: 002	OTHER: 003

Card 5/5

ACCESSION NR: AT4024399 S/2529/61/000/066/0091/0096

AUTHOR: Rebrov, A. K.; Kislyakov, N. I.

TITLE: Heat transfer from a limited flat plate during free convection in a rarefied gas

SOURCE: Kazan. Aviatsionny*y institut. Trudy*, no. 66, 1961. Aviatsionny*ye dvigateli (Aircraft engines), 91-96

TOPIC TAGS: chamber pressure, heat conduction, heat convection, heat exchange, heat transfer, convection, free convection, rarefied gas, convecting force, shell temperature, temperature, pressure

ABSTRACT: Existing generalizations and analyses applied to experimental data obtained on heat transfer from flat plates refer to cases where convective forces are localized to the very surface of the cooling body, i.e. when the thickness of the gas layer in motion is considerably less than the characteristic dimension of the surface. For theoretical investigations of such cases, common simplifications applied to the boundary layer theory are acceptable. However, in altitude equipment design and in analyses of heat systems in technological processes with vacuum applications, it is necessary to account for a considerable growth of boundary

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ACCESSION NR: AT4024399

layer thickness at decreasing pressure and for the influence of body form. To study these influences, an investigation on heat transfer from vertical flat plates was performed by the authors, and the test installation was described by one of them elsewhere (Accession Nr.: AT4024397). The test plates, packages of 240x80x1.4 mm^3 and 80x80x1.4 mm^3, consist of copper sheets 0.5 mm thick soldered at the edges with a space between the sheets accommodating mica-insulated heating wire. During experiments heating power, plate surface, and vacuum chamber shell temperatures, and the pressure in the chamber were measured. The tests were conducted over a pressure range of $5x10^{-3} < P < 120$ mm of Hg column. Two vertical positions were used for the 240x80x1.4mm^3 plate, once with the larger and once with the smaller side upright. It was found that film coefficients at heat transfer from a flat plate in the limited space of a vacuum chamber, first drop sharply with decreasing pressure, corresponding to a system of free convection; at that time the pressure dependence is only slight, and the system is one of common heat conduction; finally, with further decreases of pressure, the heat conduction system remains, but is weakened by the presence of a larger temperature step at the heat transfer surface. The existence of a system corresponding to common heat conduction was explained by the influence of chamber walls hindering a free convection. In comparison with tests obtained elsewhere on cylinders (Accession Nr.: AT4024397), the heat transfer from flat plates is considerably lower. A discussion follows

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with regard to the question of choosing a side of a rectangular plate for consideration as the characteristic length for correlation. It was concluded that in cases of free convection, M. A. Mikeyev's formula is applicable:

$$Nu = 0.54(GrPr)^{0.25} \quad \text{at } GrPr > 5\times10^{2},$$

where Nu and Gr are the criteria of Nusselt and Grashof, whereby the shorter side of the rectangular plate has to be used as the characteristic length and Pr is criterion of Prandtl. In the investigated case, however, the heat transfer is described by the formula:

$$Nu_H = 0.74(Gr_H Pr)^{0.25} \quad \text{at } 5\times10^{2} < GrPr < 2\times10^{6},$$

where the subscript H indicates that the height of the plate has to be used as the characteristic length. The more intensive heat transfer indicated by the last formula is due to conditions of experiment, where boundary layer thickness is on the same order of magnitude as plate dimensions or greater, and, consequently, heat transfer is intensified by additional heat transfer in directions across planes passing through edge faces. Orig. art. has: 3 figures and 10 formulas.

ACCESSION NR: AT4024399

ASSOCIATION: Aviatsionny*y institut, Kazan (Aviation Institute)

SUBMITTED: 05Dec61	DATE ACQ: 15Apr64	ENCL: 00
SUB CODE: TD, AS	NO REF SOV: 005	OTHER: 001

Card 4/4

KUTATELADZE, S.S.; LEONT'YEV, A.I.; RUBTSOV, N.A.; GOL'DSHTIK, M.A.; VOLCHKOV, E.P.; DAVYDOVA, M.V.; DRUZHININ, S.A.; KIRILLOVA, M.M.; MALENKOV, I.G.; MOSKVICHEVA, V.N.; MIROLOV, B.P.; MUKHIN, V.A.; MUKHINA, N.V.; REBROV, A.K.; FEDOROV, V.K.; KHABAKHPASHEVA, Ye.M.; SHTOKOLOV, L.S.; SHPAKOVSKAYA, L.I., red.

[Heat and mass transfer and friction in a turbulent boundary layer] Teplomassoobmen i trenie v turbulentnom pogranichnom sloe. Novosibirsk, Red.-izd. otdel Sibirskogo otd-niia AN SSSR, 1964. 206 p. (MIRA 18:1)

10 3500
24 5200

27245
S/170/61/004/009/004/013
B104/B125

AUTHOR: Rebrov, A. K.

TITLE: Heat exchange of a horizontal cylinder in freely moving rarefied air

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 9, 1961, 32-39

TEXT: The author presents the results of an experimental study of the heat exchange of horizontal cylinders in freely moving air. The cylinders were 1.31 mm (stainless steel) and 9.9 mm (copper) in diameter. The experiments were performed in the pressure range of 0.005-130 mm Hg at temperatures from 50 to 150°C. The cylinders were placed in a container 520 mm in diameter and 600 mm in height. The temperature of the cylinder was measured by thermocouples; the pressure in the range of 0.001-5 mm Hg was measured by a McLeod gauge, and in the range of 5-130 mm Hg by a mercury barometer. The results presented here agree well with those obtained by American research workers, and can be described by the relation $Nu = C(GrPr)^n$ with $n = 0.14 + 0.015 \log(GrPr)$ and $C = 0.98 - 0.01 (\log GrPr)^2$ within the range of $10^{-7} < GrPr < 10^3$. The relation thus obtained for the heat exchange of a

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Heat exchange of a horizontal ...

horizontal cylinder about which a laminar flow passes, may be used in the range of $10^{-7} < GrPr < 10^{8}$. The lower limit of heat-exchange intensity in case of free motion is formed by the heat transfer in the form of heat conduction. An analysis of results obtained by the present author and others shows that, if the walls of the container do not affect heat conduction, this limit will be attained at very small GrPr numbers. The results further indicate that the influence of the container walls on heat conduction need not be taken into account if $GrPr \geqslant 10^{1.5}$ (if $d_1/d_2 \leqslant 1.8 \cdot 10^{-2}$). If $d_1/d_2 \leqslant 2 \cdot 10^{-3}$, the influence of the walls need not be considered for $GrPr \geqslant 10^{-5}$. d_1 is the diameter of the specimen; d_2 is the distance between the specimen and the inner wall of the container. If the Knudsen number $K = l/d > 0.02$ (l - mean free path; d - specimen diameter), the temperature jump on the specimen, occurring during heat exchange, must be taken into account. Finally, the calculation of heat transfer with $K > 0.02$ is discussed for $GrPr < (GrPr)_T$ and $GrPr > (GrPr)_T$ where $(GrPr)_T$ is the limit below which heat transfer is effected by heat conduction. M. A. Mikheyev and S. Deshman are mentioned. There are 4 figures and 10 references:

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27245
S/170/61/004/009/004/013
B104/B215

Heat exchange of a horizontal ...

5 Soviet and 5 non-Soviet. The three references to English-language publications read as follows: A. Madden et al., Proceedings of the General Discussion on Heat Transfer, Inst. Mech. Engrs, p. 328-333, 1951; I. Kyte et al., Chemical Engineering Progress, 49, no. 12, 1953; L. L. Kavanau. Transactions of the ASME, 77, 5, 617-623, 1955.

ASSOCIATION: Aviatsionnyy institut, g. Kazan' (Institute of Aviation, Kazan')

SUBMITTED: January 16, 1961

Card 3/3

RADETSKIY, R.K., inzh.; REBROV, A.N., inzh.

Spanning of the Kama River bed in the area of the Votkinsk Hydroelectric Development. Energ. stroi. no.31:52-57 '62. (MIRA 16:7)

1. Stroitel'stvo Votkinskoy gidroelektrostantsii.
(Kama River) (Dams)

REBROV, A.S., inzh. [deceased]; USPENSKIY, V.P., inzh.; PLESHKOV, D.I., kand. tekhn. nauk; BELEN'KIY, V.I., inzh.; BERNADSKIY, G.I., inzh.; VALUTSKIY, I.I., inzh.; BAZANOV, A.F., kand. tekhn. nauk; KOGAN, I.Ya., kand. tekhn. nauk; RATNER, A.I.; VOROB'YEV, A.A., inzh.; BAUMAN, V.A., kand. tekhn. nauk; NOSENKO, N.Ye., kand. tekhn. nauk; FOKIN, M.V., inzh. [deceased]; VINOGRADOV, G.V., inzh.; GUSAKOV, M.A., inzh.; SUDAKOVICH, D.I., inzh.; Prinimali uchastiye: SIGAL',Ya.Ye., inzh.; TITOV, M.A., inzh.; OGIYEVICH, V.Ya., kand. tekhn. nauk; ZIMIN, P.A., kand. tekhn. nauk, retsenzent; LAPIR, F.A., inzh., retsenzent; PETROV, N.M., kand. tekhn. nauk, retsenzent; RYAKHIN, V.A., kand. tekhn. nauk, retsenzent; KHOLIN, N.A., inzh., retsenzent

[Construction machinery; a reference manual] Stroitel'nye mashiny; spravochnik. Izd.3., perer. i dop. Moskva, Mashinostroenie, 1965. 788 p. (MIRA 18:6)

REBROV, M., inzh.-mayor

Three in stellar orbit. Kryl. rod. 15 no.11:2-5 N '64.
(MIRA 18:3)

REBROV, Mikhail Fedorovich; MEL'NIKOV, Nikolay Andreyevich, zhurnalist; KAMANINA, N.P., general-leytenant aviatsii Geroy Sovetskogo Soyuza, red.; KHEKHLOVSKAYA, N.S., red.

[Let us meet, outer space!] Dai ruku kosmos! Moskva, Sovetskaia Rossiia, 1965. 207 p. (MIRA 18:8)

KRYUKOV, N.I., [illegible] M., Ye.N., KOSTIN, M.I.

Branch mine conveyor lines as an objec of remote control.
Nauch. trudy KNIUI no.15:63-83 '64. (MIRA 18:8)

REBROV, N.I.; NIKOPASOV, Ye.N.

Some problems in the theory and calculation of frequency relays on a series resonance circuit. Nauch. trudy KNIUI no.15: 83-97 '64. (MIRA 18:8)

REBROV, N.I.

Investigating a frequency relay on a series LC-circuit with spaced elements along the ends of the communication line. Nauch. trudy KNIUI no.15:98-108 '64.

Increase of the return rate of the VIRS-2m velocity relay by means of a nonlinear element. Ibid.:121-146 (MIRA 18:8)

REBROV, N.I.; PLATONOV, S.K.

Improved remote control system of stationary mine conveyor lines designed by the All-Union Scientific Research Coal Institute. Nauch. trudy KNTUI no.15:420-426 '64.
(MIRA 18:8)

REBROV, Sergey Alekseyevich, kand. tekhn. nauk; OL'SHANSKIY, M.A., inzh., retsenzent; KOVAL'CHUK, A.V., inzh., red. izd-va; SHAFETA, S.M., tekhn. red.

[Trolley buses; their design, operation, and maintenance] Trolleibusy; ustroistvo, ekspluatatsiia, obsluzhivanie. Kiev, Gostekhizdat USSR, 1963. 265 p. (MIR 16:8)
(Trolley buses)

REBROV, Sergey Alekseyevich; MOLODYKH, I.A., red.; TIKHONOVA, I.A., red.izd-va; KHENOKH, F.M., tekhn. red.

[Tr-8 and Tr-9 trolley buses] Trolleibusy Tr-8 i Tr-9. Moskva, Izd-vo MKKh RSFSR, 1963. 139 p. (MIRA 16:10)
(Trolley buses)

REBROV, A.S.

SOKOLOV, K.M. YEVSTAFEYEV, S.V.; ROSTOTSKIY, V.K.; STANKOVSKIY, A.P.; VARENIK, Ye.I.; ONUFRIYEV, I.A.; SVESHNIKOV, I.P.; UKHOV, B.S.; BAUMAN, V.A.; BARSOV, I.P.; BASHINSKIY, S.V.; BOYKO, A.G.; VALUTSKIY, I.I.; ZAPOL'SKIY, V.P.; ZOTOV, V.P.; IVANOV, V.A.; KAZARINOV, V.M.; LEVI, S.S.; MALOLETKOV, Ye.K.; MERENKOV, A.S.; MIROPOL'SKAYA, N.K.; OSIPOV, L.G.; PEREL'MAN, L.M.; PETROV, G.D.; PETROV, N.M.; POLYAKOV, V.I.; VATSSLAVSKAYA, L.Ya.; VAKHRAMEYEV, S.A.; VERZHITSKIY, A.M.; VLASOV, P.A.; VOL'FSON, A.V.; VOSHCHININ, A.I.; DZHUNKOVSKIY, N.N.; DOMBROVSKIY, N.G.; YEPIFANOV, S.P.; YEFREMENKO, V.P.; ZELICHENOK, G.G.; ZIMIN, P.A.; POPOVA, N.T.; ROGOVSKIY, L.V.; REBROV, A.S.; SAPRYKIN, V.A.; SOVALOV, I.G.; SOSHIN, A.V.; STARUKHIN, N.M.; SURENYAN, G.S.; TOLORAYA, D.F.; TROITSKIY, Kh.L.; TUSHNYAKOV, M.D.; FROLOV, P.T.; TSIRKUNOV, I.P.

Andrei Vladimirovich Konorov; obituary. Mekh. stroi. 16 no.1:32 Ja '59. (MIRA 12:1)

(Konorov, Andrei Vladimirovich, 1890-1958)

AUTHOR: Nebrov, A.S., Laureat of the Stalin Prize, Engineer 28-6-3/40

TITLE: Problems of Design Normalization in Excavator Building (Voprosy konstruktivnoy normalizatsii v ekskavatorostroyenii)

PERIODICAL: Standartizatsiya, 1957, # 6, pp 9-13 (USSR)

ABSTRACT: The article contains suggestions for design normalization and information on the present state of Soviet excavator production.

Thus far, the series of universal construction excavators was based on the bucket capacity (as regulated by the " ГОСТ 518-54" standard) which changes with the power of the excavator diesel engine. As a rule, however, the diesel engines used in practice do not correspond to the bucket capacity. The author suggests using the 5th preference number series of the " ГОСТ 8032-56" standard for excavator engine series and to use engine-power instead of bucket capacity as the basis for the excavator series.

The information on the present situation in the excavator building industry of USSR includes design features of excavators and critical remarks on the organization of production and the quality of caterpillar chains, pneumatic controls, etc.

The importance of centralized production by specialized plants

Card 1/2

Problems of Design Normalization in Excavator Building 28-6-3/40

is stressed and practical suggestions are made concerning the organization of production and the new standards.
There are 5 tables.

ASSOCIATION: VNIIStroydormash

AVAILABLE: Library of Congress

Card 2/2 1. Industry-Standards-USSR

REBROV, A. S., inzh., laureat Stalinskoy premii

Results of studying new building excavators equipped with buckets having a capacity of 0.15 to 1.25 m^3. Sbor. trud. MISI no.39:250-254 '61. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya.

(Excavating machinery)

Card 1/1

100-57-12-4/11

AUTHOR: Rebrov, A. S., Engineer

TITLE: Testing of the New Universal Excavator E-5010. (Ispytaniye novogo universal'nogo ekskavatora E-5010).

PERIODICAL: Mekhanizatsiya Stroitel'stva, Nr.12.1957.pp.15-20.(USSR).

ABSTRACT: The above-mentioned crane was constructed by the Kovrov Factory on VNIIStroydormash design. This new universal excavator has a bucket capacity of 0.5 - 0.6 m^3, a track undercarriage powered by diesel engine D-54, and could be used for four different purposes: direct or reverse mechanical shovel, dragline bucket, or a crane. Fig. 1 shows a diagram of the excavator, E-5010. Table 2 gives technical data on the above excavator. Table 2 and 3 give values obtained during tests of various characteristics of the crane, including the fuel consumption. Table 4 gives values obtained during test trials of the excavator. Fig.2 illustrates the crane winch with a supplementary conical drum. Fig.3 shows a diagram of the bucket of the excavator. Fig.4 gives a general outline of excavator E-5010 with the mechanical shovel set for reverse action. Fig.5 illustrates the working of the excavator with reverse bucket. Fig. 6 indicates the use of the dragline during excavation.

Card 1/2

Testing of the New Universal Excavator E-5010 . 100-57-12-4/11

Fig.7 shows the various arm lengths when the excavator is used as a crane. Fig.8 shows the results of tests on the various aspects of the crane's performance. The testing commission findings are as follows: Excavator E-5010 is an improvement on E-651. The diesel engine D-54 of 54 l.c. operates the bucket in all types of ground. The introduction of pneumatic chambers and fraction clutches improves the mechanism of the crane. The winch operates independently of the arm of the crane. The construction and situation of joints ensure easy maintenance and servicing. With the bucket in reverse, it is possible to work in a depth of up to 5.4 meters. There are 8 Figures and 4 Tables.

AVAILABLE: Library of Congress.

1. Crane-Construction 2. Shovel-Applications 3. Dragline-Applications 4. Crane-Characteristics

Card 2/2

RYAKHIN, V.A., kand.tekhn.nauk; BERKMAN, I.L., inzh.; REBROV, A.S., inzh.

Standardized series of shovel excavators and self-propelled boom cranes. Stroi. i dor. mash. 7 no.5:9-12 My '62. (MIRA 15:5)
(Excavating machinery)
(Cranes, derricks, etc.)

REBROV, A.S., laureat Stalinskoy premii, inzh.

Problems of constructive standardization in the manufacture of excavating machinery. Standartizatsiia no.6:9-13 N-D '57. (MIRA 10:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Stroydormash.
(Excavating machinery--Standards)

REBROV, A.S., inzh.

Testing the new universal E-5010 excavator. Mekh. stroi. 14 no.12: 15-20 D '57. (MIRA 11:1)

(Excavating machinery--Testing)

V

REBROV,A.S., inzhener, laureat Stalinskoy premii.

Construction of the caterpillar track of single-bucket excavators
Mekh. stroi. 12 no.4:14-15 Ap '55. (MLRA 8:6)
(Excavating machinery)

REBROV, A.S., inzhener, laureat Stalinskoy premii; VOLKOV, D.P., kandidat tekhnicheskikh nauk.

New type friction clutch for excavators. Mekh.stroi. 11 no.5:16-20 My '54. (MLRA 7:5)
(Excavators) (Clutches (Machinery))

[redacted], A. S.

Excavating Machinery

Possibilities of increasing the productivity of construction excavators. Mekh. trud. rab. 6 No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952 1953, Uncl.

KLEBKOV, A. S. (Eng.)

Excavating Machinery

Results of testing buckets of power shovels E-505 and E-1003. Mekh. stroi. 9 No. 7, 1952

Monthly List of Russian Accessions, Library of Congress, September 1952. Unclassified.

REBROV, A.S., inzhener.

Tests of the E-505 excavator using interchangeable attachments.
Mekh.stroi. 4 no.12:1-5 D '47. (MLRA 9:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut otdela stroitel'-
nogo i dorozhnogo mashinostroyeniya.
(Excavating machinery)

SOKOLOV, K.M.; YEVSTAFEYEV, S.V.; ROSTOTSKIY, V.K.; GRECHIN, N.K.; STANKOVSKIY, A.P.; BAUMAN, V.A.; BERKMAN, I.L.; BORODACHEV, I.P.; BOYKO, A.G.; VALUTSKIY, I.I.; VATSSLAVSKAYA, L.Ya.; VOL'FSON, A.V.; DOMBROVSKIY, N.G.; YEGNUS, M.Ya.; YEFREMENKO, V.P.; ZIMIN, P.A.; IVANOV, V.A.; KOZLOVSKIY, A.A.; KOSTIN, M.I.; KRIMERMAN, M.N.; LINEVA, M.S.; MERENKOV, A.S.; MIROPOL'SKAYA, N.K.; PETROV, G.D.; REBROV, A.S.; ROGOVSKIY, L.V.; SMIRNOV, G.Ya.; SHAFRANSKIY, V.N.; SHIMANOVICH, S.V.; SHNEYDER, V.A.

Evgenii Richardovich Peters; obituary; Mekh. stroi. 15 no.1:3 of cover Ja '58. (MIRA 11:1)

(Peters, Evgenii Richardovich, 1892-1957)

FRUMKIN, Boris Solomonovich; REBROV, B.V., kand. tekhn. nauk, dots., retsenzent; VASIL'YEV, V.K., nauchn. red.; SHAURAK, Ye.N., red.

[Diagram TSJ for the calculation of marine gas turbines] Diagramma TSJ dlia rascheta sudovykh gazoturbinnykh ustanovok. Leningrad, Sudostroenie, 1965. 62 p.
(MIRA 18:8)

REBROV, B.V., kand.tekhn.nauk; SAFRONOV, Ye.M., kand.tekhn.nauk

Marine power plants; manual for students of shipbuilding institutes. Sudostroenie 29 no.9:72 S '63. (MIRA 16:11)

REBROV, Boris Vasil'yevich; KOLOSOV, S.D., inzh., retsenzent; MOISEYEV, A.A., doktor tekhn.nauk, prof., retsenzent; SERDYUKOV, S.A., nauchnyy red.; SHAURAK, Ye.N., red.; TSAL, R.K., tekhn. red.

[Marine gas turbine plants] Sudovye gazoturbinnye ustanovki. Leningrad, Sudpromgiz, 1961. 535 p. (MIRA 15:3)
(Marine gas turbines)

REBROV, G. F.

124-11-12674

Translation from: Referativnyy Zhurnal. Mekhanika, 1957, Nr 11, p50 (USSR)

AUTHOR: Rebrov, G. F.

TITLE: Determination of the Actual Carrying Capacity of Water Conduits. (Opredeleniye fakticheskoy propusknoy sposobnosti vodoprovodnykh liniy)

PERIODICAL: Tr. Rostovsk.-n/D inzh.-stroit. in-ta, 1956, Nr 5, pp 279-282

ABSTRACT: The actual (overall) mass-flow capabilities of water conduits must be determined through the use of the mass-flow characteristics or moduli K which can be measured experimentally in loco for various sectors of a conduit system. The degree of reduction of the mass-flow capability of a conduit is ascertained through a comparison of its mass-flow modulus with the corresponding tabular values, whereas the head loss is determined by the A. by means of computations taking into account the length of the sector of conduit, its mass flow, and the value of K .

The paper describes the determination of the mass-flow modulus K, based on a test in which a sector of the conduit is inactivated, the pipe is disconnected at its terminals, and special test rigs and devices are installed for the measurement of mass flow and pressures.

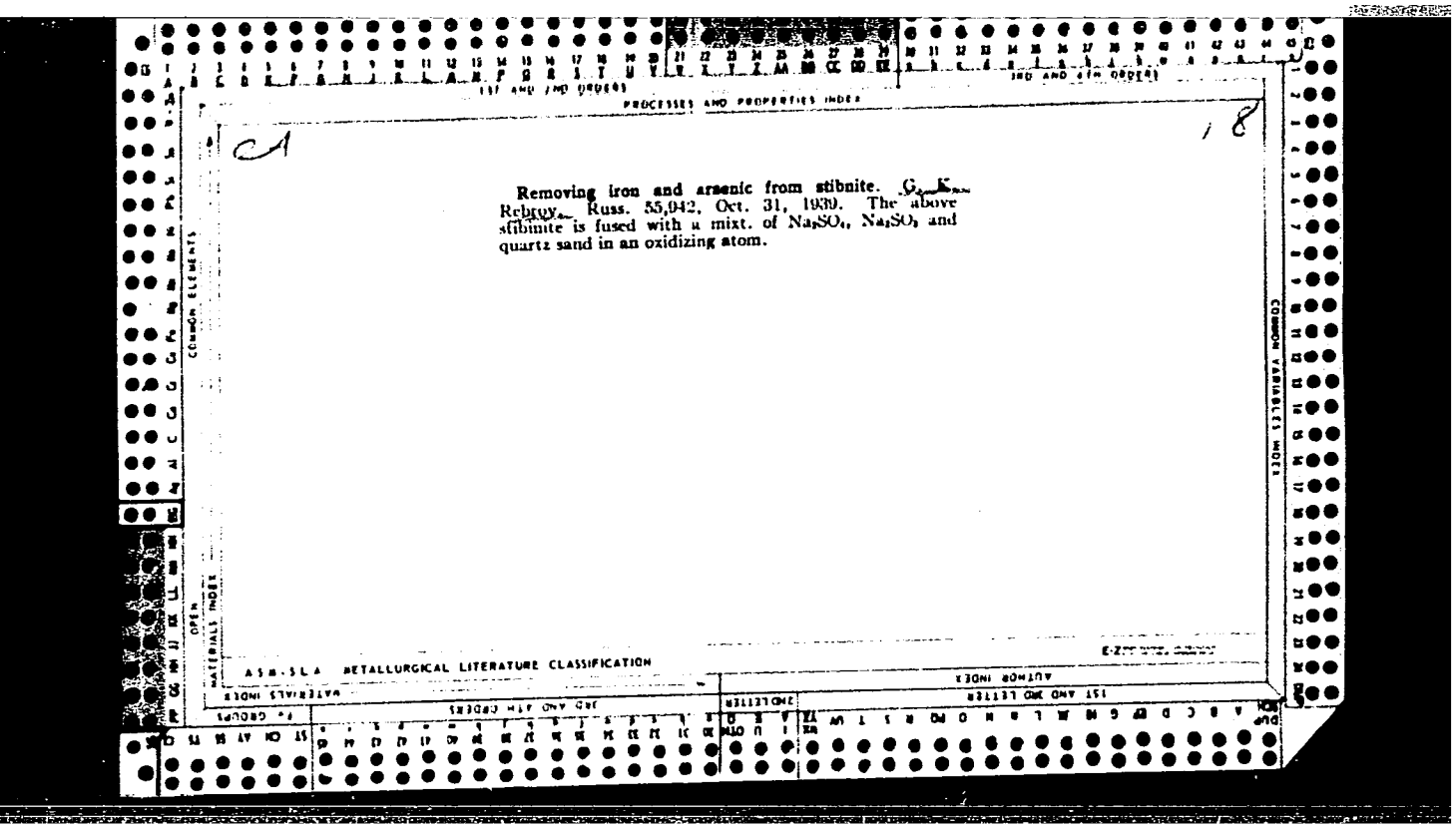
V. I. Gotovtsev

Card 1/1

REBROV, G.I., red. ; PECHENKIN, I., tekhn. red.

[Norms for issuing free work clothes, work shoes and safety devices] Normy besplatnoi vydachi spetsodezhdy, spetsobuvi i predokhranitel'nykh prisposoblenii. Moskva, Gos. izd-vo sel'-khoz. lit-ry, 1961. 130 p. (MIRA 14:9)

1. Russia (1923- U.S.S.R.) Ministerstvo sel'skogo khozyaystva. (Work clothes) (Safety appliances)



Removing iron and arsenic from stibnite. G. K. Rebrov. Russ. 55,042, Oct. 31, 1939. The above stibnite is fused with a mixt. of Na_2SO_4, Na_2SO_3 and quartz sand in an oxidizing atom.

REBROV, M., inzhener-kapitan

"Powerful wings." Vest. Vozd. Fl. no.12:88-90 D '61.
(MIRA 15:3)
(Motion-picture plays) (Russia--Air force)

REBROV, M.

Cradle of astronautics. Znan. ta pratsia no.2:3-5 F '63.
(MIRA 16:4)

1. Glavnyy redaktor zhurnala "Aviatsiya i kosmonavtika".

(Astronautics)

SELYANINOV, L.I., general-mayor inzh.-tekhnicheskoy sluzhby
REBROV, M.F., inzh.-kapitan

New advances become part of life. Vest. Vozd. Fl. no.10:29-37 O '61. (MIRA 15:2)
(Airplanes, Military--Maintenance and repair)

AID P - 5466

Subject : USSR/Aeronautics - maintenance

Card 1/1 Pub. 135 - 12/29

Author : Rebrov, M. F., Sen. Eng-Lt.

Title : Modernization of equipment of repair enterprises

Periodical : Vest. vozd. flota, 2, 57-58, F 1957

Abstract : The author describes how in various repair enterprises the obsolete benches are replaced by the modern ones in order to raise the production. The article is of informative value.

Institution : None

Submitted : No date

AID P - 5467

Subject : USSR/Aeronautics - maintenance

Card 1/1 Pub. 135 - 13/29

Author : Rebrov, M. F., Sen. Eng.-Lt.

Title : Diligence, mastery, initiative

Periodical : Vest. vozd. flota, 2, 59-63, F 1957

Abstract : The everyday routine work and the achievements of an outstanding officer, the head of the maintenance group of the unit, are described in this article. Two photos. The article is of informative value.

Institution : None

Submitted : No date

REBROV, M.F., starshiy inzhener-leytenant.

At the land base. Vest.Vozd.Fl. 40 no.[illegible] (Aeroplanes--Maintenance and repair)

86-10-42/44

AUTHOR: Rebrov, M. F., Sen. Eng. Lt.

TITLE: At an Aircraft Factory (Na aviatsionnom zavode)

PERIODICAL: Vestnik Vozdushnogo Flota, 1957, Vol. 40, Nr 10, pp. 86-90 (USSR)

ABSTRACT: A story relating the hard-working personnel in an unspecified Soviet aircraft factory, built about a generation ago, which, apparently, has been producing mainly the fighter aircraft, and which, during the World War II, was awarded the Red Banner 28 times. Before 1936, one of the first aircraft designed by N. N. Polikarpov was built in this factory. During the World War II, the factory was enlarged and its equipment renovated. By the beginning of the war, the factory was producing the LaGG-3 fighters. Thereafter, it started the production of the more modern La-5, La-5fn, La-7, and many other aircraft. The "front brigades", then created with the idea of taking care of the strenuous production work for the frontline, were enthusiastically patronized by the youth. Designers worked hard to raise

CARD 1/2

At an Aircraft Factory (Cont.)

their own efficiency; in this respect, engineer Ye. I. Mindorov was very successful. "The field-repair brigades" were organized at the factory, too; they went to the field units to repair aircraft under field conditions and, not infrequently, under fire. More than 20,000 aircraft were thus repaired during the war. When the offensive of the Soviet armed forces began, aircraft were often delivered from the factory directly to the forward-area airdromes; during the Stalingrad battle, flyers of the division commanded by Major General of the Air Force I. A. Lakeyev flew aircraft directly from the factory to frontline areas. Following this battle, new assembly lines were started at the factory and production output was stepped up. Since the end of the World War II, the factory has continued to improve the aircraft design and modernize the production technology. In the spring of 1957, the foremost personnel of the factory were awarded diplomas by the Presidium of the Supreme Council of the Russian Soviet Federated Socialist Republic. Three photos.

AVAILABLE: Library of Congress.

CARD 2/2

86-58-5-25/38

AUTHOR: Rebrov, M. F., Sen Engr-Lt

TITLE: A Base Works at Night (Baza rabotayet noch'yu)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 5, pp 61-65 (USSR)

ABSTRACT: This article describes in general terms how the preparation and servicing of aircraft is carried out by the technical personnel during night flights on an air force base. The following points of interest mentioned are: (1) Night flights begin after a favorable weather report is received from a specially assigned weather reconnaissance aircraft. (2) The aircraft are towed to the starting line by tow tractors. (3) The path from the aircraft parking place to the starting line is marked by portable lanterns. (4) The headlights of servicing trucks are dimmed by shutters in order not to blind the pilots while landing. Experience has shown that it is good to have all servicing facilities distributed equally among the squadrons. This reduces the traffic of transport vehicles and servicing facilities during the preparation and servicing of aircraft between flights. The necessary servicing vehicles are called to the aircraft by the signals of electric torches. All shortcomings in servicing which occur during the night are made known and explained to all personnel on the following morning. Very often some subunits of an air regiment fly at night and others in daytime. In such cases the technical personnel of an air base works in two shifts. Special courses are organized for the training of drivers of servicing vehicles, because much skill is needed when approaching an aircraft that has to be serviced at night.

Card 1/1

1. Aviation personnel-Training methods 2. Air force operations - USSR

PHASE I BOOK EXPLOITATION SOV/5251

Rebrov, Mikhail Fedorovich, Engineer, Captain

Chto delayut avtomaty na samolete? (Performance of Automatic Devices on Aircraft) Moscow, Voyenizdat M-va obor. SSSR, 1960. 177 p. Errata slip inserted. (Series Nauchno-populyarnaya biblioteka Voyennogo izdatel'stva) No. of copies printed not given.

Ed. (Title page): V.A. Bodner, Professor, Doctor of Technical Sciences, General-Major in Engineering and Technical Service; Ed.: M.V. Druzhinskiy, Tech. Ed.: G.F. Sokolova

PURPOSE: This book is intended for the general reader with some knowledge of electrodynamics, mathematics, and physics.

COVERAGE: The book describes the designs and operating principles of automatic devices used in modern aircraft. A discussion is given of the types of problems that can be solved in flight by such devices. Probable future developments in aircraft automation are briefly indicated. The book is based on Soviet and non-Soviet sources. No personalities are mentioned. There are 23 references: 12 Soviet and 11 English.

Card 1/4

SOKOLOV, V.S., podpolkovnik; REBROV, M.F., inzhener-kapitan

Test pilot Rusakova. Vest.Vozd.Fl. no.3:70-75 Mr.'60. (MIRA 13:9)
(Rusakova, Nina Ivanovna)

REBROV, M.F., inzh.-kapitan

In the forward area. Vest.Vozd.Fl. no.6:75-79 Je '60.
(MIRA 13:7)

(Frolov, Ivan Timofeevich)

UGAROV, A.I., inzh.-mayor; REBROV, M.F., inzh.-kapitan

Neglect the small things and you'll lose the large ones altogether. Vest.Vozd.Fl. no.9:69-73 S'60. (MIRA 13:10)
(Airplanes--Maintenance and repair)

KELEYNIKOV, Yu.Ya., polkovnik, voyennyy letchik pervogo klassa; SOKOLOV, V.D., podpolkovnik; STEPANENKO, P.I., mayor; REBROV, M.F., inzh.-kapitan; PEL'KIN, V.P., starshiy leytenant, voyennyy letchik vtorogo klassa

Flight day. Vest.Vodz.Fl. no.12:1-20 D '60. (MIRA 14:5)
(Flight training)

REBROV, M.; SOKOLOV, V.

Honored women pilot of our country. Kryl.rod. 11 no.3:10 Mr '60. (MIRA 13:5)
(Women in aeronautics)

IL'YUSHIN, V.S., podpolkovnik, Geroy Sovetskogo Soyuza, letchik-ispytatel' pervogo klassa; REBROV, M.F., inzhener-kapitan; KOBLIKOV, V.N., general-leytenant inzhenerno-tekhnicheskoy sluzhby; OSTROUMOV, N.N., general-leytenant aviatsii

The strength of the flyer is in knowledge of combat material. (MIRA 14:8)
Vest.Vozd.Fl. no.6:41-51 Je '61.
(Flight training)

SEDOV, G.A., zasl. letchik-ispytatel' SSSR, Geroy Sovetskogo Soyuza, inzh.-polkovnik; REBROV, M.F., inzh., kapitan; MEDVEDEV, I.M., podpolkovnik, red. gvardii, MYASNIKOVA, .T.F., tekhn. red.

[Applied aerodynamics for pilots] Letchiku o prakticheskoi aerodinamike. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 230 p. (MIRA 14:11)

(Aerodynamics)